

IN THE CLAIMS

Claims 1-7 (previously cancelled without prejudice).

1 8. (amended) A device comprising a vacuum microelectromechanical device
2 that comprises:
3 a device substrate;
4 a cathode attached to the device substrate, the cathode comprising electron
5 emitters;
6 a grid attached to the device substrate wherein the grid is configured to modulate
7 electrons drawn from the cathode; and
8 an output structure,
9 wherein the cathode surface and the grid surface are substantially parallel, and
10 wherein the cathode, the grid, or the cathode and the grid are attached to the device
11 substrate by one or more flexural members.

1 9. (original) The device of claim 8, wherein the cathode and the grid are
2 attached to the device substrate by one or more flexural members.

1 10. (original) The device of claim 8, wherein the cathode surface and the grid
2 surface are substantially perpendicular to the device substrate surface.

1 11. (original) The device of claim 10, wherein the cathode and the grid are held
2 in the substantially perpendicular position by locking mechanisms, the locking
3 mechanisms attached to the device substrate by one or more flexural members.

1 12. (original) The device of claim 8, wherein the output structure comprises an
2 anode attached to the device substrate, wherein the anode surface is substantially parallel
3 to the cathode surface and the grid surface.

1 13. (original) The device of claim 12, wherein the anode is attached to the
2 device substrate by one or more flexural members.

1 14. (original) The device of claim 8, wherein the device further comprises one
2 or more additional grids attached to the device substrate by one or more flexural
3 members.

1 15. (original) The device of claim 8, wherein the cathode comprises carbon
2 nanotube emitters.

1 16. (original) The device of claim 8, wherein the surfaces of the cathode and the
2 grid are $10^6 \mu\text{m}^2$ or less.

1 17. (original) The device of claim 8, wherein the spacing between the cathode
2 and the grid is less than 50 μm .

1 18. (original) The device of claim 8, wherein the vacuum
2 microelectromechanical device is a triode device, a tetrode device, a pentode device, a
3 klystrode device, a traveling wave tube device, or a klystron device.

1 19. (original) The device of claim 8, wherein the device comprises a plurality of
2 vacuum microelectromechanical devices, each of the plurality of vacuum
3 microelectromechanical devices comprising:

4 a device substrate;

5 a cathode attached to the device substrate, the cathode comprising electron
6 emitters;

7 a grid attached to the device substrate; and

8 an output structure,

9 wherein the cathode surface and the grid surface are substantially parallel, and
10 wherein the cathode, the grid, or the cathode and the grid are attached to the device
11 substrate by one or more flexural members.

1 20. (original) The device of claim 19, wherein at least a portion of the plurality
2 of vacuum microelectromechanical devices are interconnected to provide an integrated
3 electronic circuit.

Claims 21-40 (previously cancelled without prejudice).